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Autore	Seeber Gunter <1941->
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Nota di contenuto	Front matter -- Contents -- 1. Introduction -- 2. Fundamentals -- 3. Satellite Orbital Motion -- 4. Basic Observation Concepts and Satellites Used in Geodesy -- 5. Optical Methods for the Determination of Directions -- 6. Doppler Techniques -- 7. The Global Positioning System (GPS) -- 8. Laser Ranging -- 9. Satellite Altimetry -- 10. Gravity Field Missions -- 11. Related Space Techniques -- 12. Overview and Applications -- Backmatter
Sommario/riassunto	This book covers the entire field of satellite geodesy and is intended to serve as a textbook for advanced undergraduate and graduate students, as well as a reference for professionals and scientists in the fields of engineering and geosciences such as geodesy, surveying engineering, geomatics, geography, navigation, geophysics and oceanography. The text provides a systematic overview of fundamentals including reference systems, time, signal propagation and satellite orbits, together with observation methods such as satellite laser ranging, satellite altimetry, gravity field missions, very long baseline interferometry, Doppler techniques, and Global Navigation Satellite Systems (GNSS). Particular emphasis is given to positioning techniques, such as the NAVSTAR Global Positioning System (GPS), and to applications. Numerous examples are included which refer to recent results in the fields of global and regional control networks; gravity field modeling; Earth rotation and global reference frames; crustal

motion monitoring; cadastral and engineering surveying; geoinformation systems; land, air, and marine navigation; marine and glacial geodesy; and photogrammetry and remote sensing. This book will be an indispensable source of information for all concerned with satellite geodesy and its applications, in particular for spatial referencing, geoinformation, navigation, geodynamics, and operational positioning.